

St. Thomas, W. I. 16th Sept. 1878

Prof. Asa Gray

Cambridge University

Sir!

Having for several years past occupied myself in researches on the Flora of the Virgin Islands and the adjacent island of St. Cruz I now propose to offer for publication the results of my investigations to some scientific journal in the U. S. and therefore beg leave to address myself to you on this subject, hoping you will kindly excuse my intruding thus upon your valuable time.

As no doubt you are aware the various publications on the Flora of the W. I. of Prof. Griseb. and others from want of material entirely disregard the islands mentioned above. Yet these comparatively insignificant clusters of isles have proved of the greatest interest in various respects, partly as forming a connecting link between the larger Antilles and the lesser Caribbean Islands and partly as showing a striking difference in the vegetation of adjacent and apparently homogenous territories, the consequence no doubt of a different geological origin. Thus, out of a total number of 900 indigenous species in St. Cruz and the Virgin islands 580 species only are found on both sides of the channel between them, whilst no less than 320 or rather more than 35 per cent. are found on one side only, viz. 97 in St. Cruz and 223 on the Virgin group.

This fact becomes doubly interesting from the circumstance that among these latter species are comprehended many of the most common and widely distributed plants.

As there is no strong maritime current such as the Gulfstream running between the islands, that might account for these marked differences and all other natural conditions being very much the same on them all, these we

no doubt have to look for an explanation to the geological origin of the island, the Virgin group having in former times been connected separately and with Portorico, as the intermediate channels have a depth of from 6 to 20 fathoms only, whilst St^a Cruz is separated from them by an immense chasm of more than 2300 fathoms. The same differences as with regard to the flora also exist respecting the fauna and thus on a small scale seem to form an interesting illustration of the theory of Mr. Wallace for explaining similar facts in the Malayan Archipelago.

In aiming at bringing forward these hitherto unknown facts as far as the flora on St^a Cruz and the Virgin group is concerned, my proposed treatise will thus naturally consist of two parts, the one systematical, enumerating the vascular species indigenous, naturalized and cultivated, comprising among the former 5 new species (besides an enumerated genus of Rhamnaceae, a description of which I beg leave to forward by this opportunity), and accompanied by such remarks as will supplement or correct former descriptions; the other phytogeographical, working out the general results of the material contained in the former in connection with observations on the meteorology and geology of the island as far as necessary in order to explain the general character of the vegetation.

Personally I have investigated the island of St^a Cruz, on the flora of which island I some three years ago have published a treatise in the Danish language (Proceedings of the Soc. of Nat. Hist. in Copenhagen, 1876), St. Thomas, St. Jan, Water Island, Little Saba and several lesser Cays. From Vieques (Crab Island) and Tortola I have received collections from various friends.

Besides these researches, I have availed myself of my visits to Copenhagen to inspect former collections from these islands, principally from the time of Martin Vahl, preserved in the royal Danish bot. Museum.

As for the determination of species I have chiefly followed the standard works of Prof. Grisebach on the West Indian flora as well as those of other authors, such as ~~Chaudoles~~ Prodonus, Schott's Aroidae etc. A few doubtful species have been determined in Europe by various monographers.

My collections of cellular cryptogamous plants, parts of which have been determined already, (mosses by Kämpfe, fungi by the Rev. Berkeley) and which I am continually enlarging, I propose to reserve for publication at another time.

Having thus shortly stated the nature of my work and having formed no scientific connections as yet in the U. S., I should feel much obliged, if you would be kind enough to inform me in which way I most conveniently could have my treatise published in the English language in your country.

I remain, Sir, with sincere regard

Yours truly
Eggers